tricity used, either per event of cumulatively, may be determined by outlet sensor module **14**. A variety of other sensors may be used to monitor a variety of other system parameters.

[0714] In either of the cases described above, input sensor modules **21** and **23** as well as output sensor modules **11** and **14** may be coupled to a controller **1**, electrically or otherwise, in order to process, concatenate, store, or communicate the output values of the respective sensor modules as now described in the following section.

10.2 Communications

[0715] The sensors described above may be used to monitor and/or record the various parameters described above onboard the generation device **10**, or in an alternative embodiment, the generation device **10** may be equipped with a communication system **17**, such as a cellular communication system. The communication system **17** could be an internal system used solely for communication between the generation device **10** and the monitoring station **20**. Alternatively, the communication system **17** could be a cellular communication system that includes a cellular telephone for general communication through a cellular satellite system **19**. The communication system **17** may also employ wireless technology such as the Bluetooth® open specification. The communication system **17** may additionally include a GPS (Global Positioning System) locator.

[0716] Communication system **17** enables a variety of improvements to the generation device **10**, by enabling communication with a monitoring station **20**. For example, the monitoring station **20** may monitor the location of the generation device **10** to ensure that use in an intended location by an intended user. Additionally, the monitoring station **20** may monitor the amount of water and/or electricity produced, which may allow the calculation of usage charges. Additionally, the determination of the amount of water and/or electricity produced during a certain period or the cumulative hours of usage during a certain period, allows for the calculation of a preventative maintenance schedule. If it is determined that a maintenance call is required, either by the calculation of usage or by the output of any of the sensors used to determine water quality, the monitoring station **20** may arrange for a maintenance visit. In the case that a GPS (Global Positioning System) locator is in use, monitoring station **20** may determine the precise location of the generation device **10** to better facilitate a maintenance visit. The monitoring station **20** may also determine which water quality or other tests are most appropriate for the present location of the generation device **10**. The communication system **17** may also be used to turn the generation device **10** on or off, to pre-heat the device prior to use, or to deactivate the system in the event the system is relocated without advance warning, such as in the event of theft.

[0717] This information may be advantageously monitored through the use of a web-based utility monitoring system, such as those produced by Teletrol Systems, Inc. of Manchester, N.H.

10.3 Distribution

[0718] The use of the monitoring and communication system described above facilitates the use of a variety of utility distribution systems. For example, with reference to FIG. **30**, an organization **30**, such as a Government agency, non-governmental agency (NGO), or privately funded relief organization, a corporation, or a combination of these, could provide distributed utilities, such as safe drinking water or electricity, to a geographical or political area, such as an entire country. The organization **30** may then establish local distributors **31**A, **31**B, and **31**C. These local distributors could preferably be a monitoring station **20** described above. In one possible arrangement, organization **30** could provide some number of generation devices **10** to the local distributor **31**A, etc. In another possible arrangement, the organization **30** could sell, loan, or make other financial arrangements for the distribution of the generation devices **10**. The local distributor **31**A, etc. could then either give these generation devices to operators **32**A, **32**B, etc., or provide the generation devices **10** to the operators though some type of financial arrangement, such as a sale or micro-loan.

[0719] The operator **32** could then provide distributed utilities to a village center, school, hospital, or other group at or near the point of water access. In one preferred embodiment, when the generation device **10** is provided to the operator **32** by means of a micro-loan, the operator **32** could charge the end users on a per-unit basis, such as per watt hour in the case of electricity or per liter in the case of purified water. Either the local distributor **31** or the organization **30** may monitor usage and other parameters using one of the communication systems described above. The distributor **31** or the organization **30** could then recoup some of the cost of the generation device **10** or effect repayment of the micro-loan by charging the operator **32** for some portion of the per-unit charges, such as 50%. The communication systems described additionally may be used to deactivate the generation device **10** if the generation device is relocated outside of a pre-set area or if payments are not made in a timely manner. This type of a distribution system may allow the distribution of needed utilities across a significant area quickly, while then allowing for at least the partial recoupment of funds, which, for example, could then be used to develop a similar system in another area.

[0720] While the principles of the invention have been described herein, it is to be understood by those skilled in the art that this description is made only by way of example and not as a limitation as to the scope of the invention. Other embodiments are contemplated within the scope of the present invention in addition to the exemplary embodiments shown and described herein. Modifications and substitutions by one of ordinary skill in the art are considered to be within the scope of the present invention.

1. A water vending system comprising:

a dispensing device, wherein the dispensing device is in fluid communication with a water source and whereby water from the water source is dispensed by the dispensing device; and

a multi-purpose interface comprising a spout and at least one conductivity sensor, located downstream from the spout, the multi-purpose interface located on the dispensing device,

wherein the at least one conductivity sensor for measuring conductivity of the water supplied to the at least one conductivity sensor from the spout.

2. The water vending system of claim **1** wherein the water source is a water vapor distillation apparatus fluidly connected to the dispensing device.